

Patent Claims

1. Device (1) for feeding foil (2, 2a, 2b) for the manufacture of foil bags with:

at least one supply roll holder (3, 3a, 3b) that can be driven with a drive;

at least one piece of conveyor equipment (4), for conveying a foil (2, 2a, 2b) from a supply roll (5, 5a, 5b), which is held in the supply roll holder (3, 3a, 3b);

at least one foil sensor mechanism (6, 6a, 6b);

which is arranged between the supply roll holder (3, 3a, 3b) and the conveyor equipment (4);

which includes at least one stationary deflection roll (7, 7a, 7b) and, held in movable supports (10, 10a, 10b, 11, 11a, 11b), a first and second dancer roll (8, 8a, 8b, 9, 9a, 9b) for turning the foil (2, 2a, 2b) around;

whereby the foil sensor mechanism (6, 6a, 6b) for regulating the drive of the supply roll holder (3a, 3b) is formed in dependence on the distance from the first and/or second dancer roll (8, 8a, 8b, 9, 9a, 9b) to the deflection roll (7, 7a, 7b),

characterised in that

the supports (10, 10a, 10b, 11, 11a, 11b) of the first and second dancer rolls (8, 8a, 8b, 9, 9a, 9b) are hung into at least one flexible hanger (12, 12a, 12b) that is guided via a deflection wheel (13, 13a, 13b, 14, 14a, 14b) and in this way so coupled together that the weights of the first and second dancer rolls (8, 8a, 8b, 9, 9a, 9b) are at least partially offset.

2. Device according to Claim 1, **characterised in that** the first dancer roll (8, 8a, 8b) is arranged in a foil loop that is open to the top and the second dancer roll (9, 9a, 9b) in a foil loop that is open to the bottom.

3. Device according to Claim 1, **characterised in that** the first dancer roll (8, 8a, 8b) is arranged in a foil loop that is open to the bottom and the second dancer roll (9, 9a, 9b) in a foil loop that is open to the top.

4. Device according to one of the Claims 1 to 3, **characterised in that** the flexible hanger (12, 12a, 12b) is given by a belt, toothed belt, rubber belt, a line, cord, chain, ribbon, rope or the like.

5. Device according to one of the Claims 1 to 4, **characterised in that** the flexible hanger (12, 12a, 12b) is a toothed belt and the deflection wheel (13, 13a, 13b, 14, 14a, 14b) is a toothed wheel.

6. Device according to one of the Claims 1 to 5, **characterised in that** at least two additional stationary deflection rolls (15, 15a, 15b, 16, 16a, 16b) are arranged between the first and second dancer rolls (8, 8a, 8b, 9, 9a, 9b).

7. Device according to one of the Claims 1 to 6, **characterised in that** at least one of the first and second dancer rolls (8, 8a, 8b, 9, 9a, 9b) is pre-tensioned by a weight, an elastic pretension element, a spring, a rubber band or a rubber cord.

8. Device according to one of the Claims 1 to 7, **characterised in that** sensors (17a, 17b, 17c, 17d) for the detection of the position of the first and/or second dancer roll (8, 8a, 8b, 9, 9a, 9b) are provided.

9. Device according to one of the Claims 1 to 8, **characterised in that** sensors for the detection of the position of the dancer rolls are provided on the deflection wheel.

10. Device (23) for the manufacture of foil bags with:
a heat-sealing device (24) for heat-sealing of at least two foils (2a, 2b),
characterised by

at least two devices according to one of the Claims 1 to 9 for feeding the two foils (2a, 2b).

11. Device according to Claim 10, **characterised in that** the conveyor equipment (4) is formed for conveying both foils (2a, 2b).